Useful Geospatial Data Sources

Nationwide and worldwide geospatial data

data.gov, http://geo.data.gov/geoportal/

Intro: Data.gov is a U.S. government website launched in late May 2009 by the then Federal Chief Information Officer (CIO) of the United States. The purpose of Data.gov is to increase public access to high value, machine readable datasets generated by the Executive Branch of the Federal Government. A lot of geospatial data are available on this site. It takes some time to search

U.S. Geological Survey, http://www.usgs.gov/pubprod/index.html

Intro: USGS study the landscape of the United States, its natural resources, and the natural hazards that threaten it. The organization has four major science disciplines, concerning biology, geography, geology, and hydrology. Data including topo maps, historical topographic maps, aerial photographs, satellite images, digital elevation model (DEM), Digital Line Graphs (DLG) etc. can be downloaded here. This site has very comprehensive data coverage. Many high resolution images are available.

Data can be explored through this site: http://earthexplorer.usgs.gov/

U.S. Department of Agriculture, http://www.usda.gov/wps/portal/usda/usdahome

Intro: USDA is the United States federal executive department responsible for developing and executing U.S. federal government policy on farming, agriculture, and food. On their site, a lot of useful data can be downloaded here.

For example, from the GeoSpatialDataGateway, a lot of useful spatial information can be downloaded: http://datagateway.nrcs.usda.gov/GDGOrder.aspx.

USGS National Geological Map Database : This site provides access to maps and other spatially referenced data for: geology, geophysics, marine geology, earth resources, hazards, geochemistry, and geochronology, http://ngmdb.usgs.gov/

GIS Data Depot, http://data.geocomm.com/

Intro: GIS Data Depot has a lot of nationwide data. Much data on this site are free. Data can be downloaded by geographic area and broken down to county level.

Direct explorer page can be accessed here, http://data.geocomm.com/catalog/index.html

US Census Bureau,

Intro: US census bureau provides public available national demographic and economic data. Several useful links are listed below:

US Census Bureau State & County QuickFacts, http://quickfacts.census.gov/qfd/index.html

US Census Bureau FactFinder, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

US Census Bureau Population Finder, http://www.census.gov/popfinder/

TIGER is short for Topologically Integrated Geographic Encoding and Referencing. From TIGER, a lot of geospatial data, such as boundaries (tract, voting district, urban area etc.), features (water, road, landmarks etc.) are available. The datasets are comprehensive and regular updated, http://www.census.gov/geo/maps-data/data/tiger.html .

National Atlas Data, http://www.nationalatlas.gov/index.html

Intro: National Atlas Data covers data in many disciplines. Nearly all data available in the National Atlas Map Maker can be downloaded at no cost. It also has a detailed guide to search data on this site. Data in the domains of agriculture, environment, biology, geology, people, government, transportation, climate, history and water is provided on this site.

Data can be explored on this site, http://www.nationalatlas.gov/atlasftp.html#efct03x

OpenStreetMap, http://www.openstreetmap.org/

Intro: OpenStreetMap (OSM) is a collaborative project to create a free editable map of the world. Road data *worldwide* can be exported from this site

EPA National Geospatial Program: http://www.epa.gov/geospatial/

Intro: EPA's National Geospatial Program coordinates the Agency's geospatial data, applications, policies and programs. Some environmental data is available on this site.

Example: nationwide air quality data can be downloaded here: http://www.epa.gov/airquality/airdata/index.html

University of Arkansas, http://libinfo.uark.edu/GIS/us.asp

Intro: This site provides national geospatial and attributes links by each state. This is a useful and well-organized website for downloading.

DIVA-GIS http://www.diva-gis.org/

Intro: DIVA-GIS is a free computer program for mapping and geographic data analysis (a geographic information system (GIS). With DIVA-GIS you can make maps of the world, or of a very small area. On this site, many line features worldwide can be downloaded.

Data can be explored on this site, http://www.diva-gis.org/gdata

Regional geospatial data

a. Illinois

Illinois State Water Survey, http://www.isws.illinois.edu/data.asp

Intro: Weather, agriculture, streamflow, flow, drought, groundwater, and atmosphere and precipitation data is available on this site.

Illinois Natural Resources Geospatial Data Clearinghouse, http://www.isgs.uiuc.edu/nsdihome/

Intro: Access Illinois GIS data sets and documentation (metadata) for ArcIMS Interactive Map Services, USGS digital topographic maps, aerial photography, orthoimagery, orthophotography, geology, land use, natural resources, and infrastructure. Illinois data sets and map data layers are available for download free of charge.

Example: LIDAR data can be downloaded here:
http://www.isgs.uiuc.edu/nsdihome/webdocs/ilhmp/data.html

b. Chicago:

Chicago Department of Innovation & Technology:
http://www.cityofchicago.org/city/en/depts/doit.html

Intro: A very comprehensive data including education, transportation, health, park, public safety, sanitation, environment, buildings etc. can be download from this site.

Data explorer portal: https://data.cityofchicago.org/browse?tags=gis

c. Other regions

Intro: Other states offer similar clearinghouse sites. Usually these are associated with natural resource, environmental, and planning agencies:

North Carolina: North Carolina Center for Geographic Information and Analysis
http://www.cgia.state.nc.us/

Massachusetts: Massachusetts Geographic Information System
http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/

New York State: New York State Geographic Information System Clearinghouse
http://gis.ny.gov/?nysgis=

Wyoming: Wyoming Geographic Information Science Center
http://www.uwyo.edu/wygisc/